INTRODUCTION TO HIGH PERFORMANCE LIQUID CHROMATOGRAPHY

About AES Laboratories

Established in 1983, AES Laboratories is an NABL accredited laboratory in the fields of chemical, biological and mechanical testing.. The laboratory is recognized by various government and private organizations and are providing analytical services to these sectors in the fields of food, environment, petroleum, construction materials and microbiology and various other chemical testing. The laboratory has extensive modern infrastructure with latest technology in laboratory instrumentation along with a well qualified team of laboratory professionals.



Our Training Programs

The laboratory regularly offers training programs designed to meet the needs of all levels of students or professionals related to the field of laboratory analysis. The laboratory is also acting as a study centre for IGNOU for the course on Post-Graduate Diploma in Food Safety and Quality Management (PGDFSQM). Our training courses offer limited class size to ensure maximum learning benefits for our students.

Course Objective

HPLC is used in analytical chemistry for separating different components in a mixture, to identify & quantify each component. HPLC has contributed to analytical solutions in diverse fields such as pharmaceuticals, foods, life sciences, environment, forensics, etc. HPLC provides reliable quantitative precision and accuracy along with a high linear dynamic range to allow determination of substances in a single run. High Performance Liquid Chromatography has brought desirable advantages in the field of food analysis. HPLCs can be used in water purification, preconcentration of trace components & high-pH anion-exchange chromatography of carbohydrates and oligosaccharides.

This is a 5 day introductory course for the HPLC novice as well as those who want to learn basic principle in HPLC and gain a more fundamental approach to the current HPLC technology. The program will provide hands on training on operation of the HPLC and basic trouble-shooting. By the end of this course, the candidates will have a good understanding of gas chromatography and will have good hands-on operational knowledge of HPLC. The learners get the additional benefits of understanding work place environment through interaction with our technical experts. The course also lays stress on basic laboratory procedures which often get overlooked in university curriculum.

Who should attend

All those who are interested in pursuing a laboratory career or a career in residues, environment, agriculture or food sciences. The program is beneficial to fresh graduates who are looking forward to a career in industrial quality control and research labs and also to working professional who get an opportunity to upgrade their skills and awareness of the advances in the technique. The basic qualification for attending this course is either a B.Sc. Degree, or completion of 12th class with a minimum of 1 year relevant lab experience.

Course Contents

- Basic principles and fundamentals of chromatography
- Liquid chromatography & its evolution
- Types of stationary phases & mobile phases
- Types of detectors, pumps & injectors
- System startup and Sample introduction
- Method development, calibration overview and running of samples
- Reporting results & Data management
- Routine maintenance & basic troubleshooting

For more information regarding this training program, please contact us at:

